

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P644670

Luminaire Tested: OMN4DIP-SR4F0-125D100U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644670
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D100U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

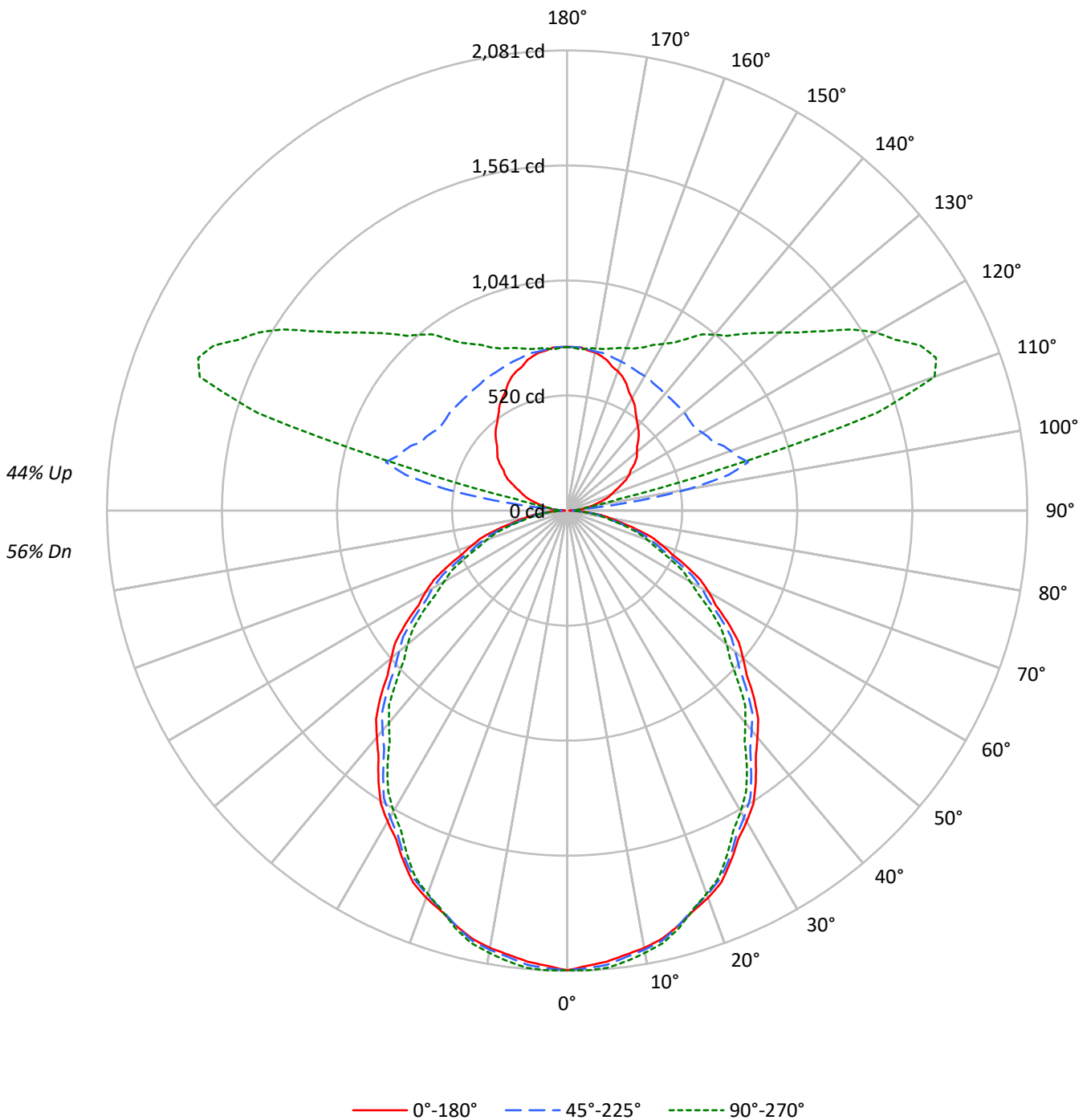
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9047.0 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 69
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	74	71	65	63	61	54	53	52	47
2	90	83	77	72	84	77	72	67	67	63	59	57	54	51	48	46	44	40
3	83	73	66	60	76	68	62	56	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	53	48	53	47	43	45	41	38	38	35	32	29
5	69	58	50	44	64	54	47	41	47	41	37	41	36	33	35	31	28	25
6	64	52	44	38	59	49	41	36	43	37	32	37	32	29	31	28	25	22
7	59	47	39	33	55	44	37	32	39	33	29	34	29	25	29	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	31	26	23	26	23	20	18
9	51	39	32	26	48	37	30	25	32	27	23	28	24	21	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33562	33562	33562
5°	33187	33415	33645
10°	32921	33060	33292
15°	32476	32476	32665
20°	32022	31780	31682
25°	31187	30936	30533
30°	30266	29843	29263
35°	29321	28596	27928
40°	28195	27360	26407
45°	27252	26218	24928
50°	26070	24935	23657
55°	25078	23803	22370
60°	23928	22649	20731
65°	22690	21070	19450
70°	21493	19492	18156
75°	20112	17817	16937
80°	18410	16299	15518
85°	17284	15191	14153

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 27252 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	2.2
10°-20°	548.7	6.1
20°-30°	797.9	8.8
30°-40°	907.6	10.0
40°-50°	884.9	9.8
50°-60°	755.3	8.3
60°-70°	548.9	6.1
70°-80°	310.4	3.4
80°-90°	97.2	1.1
90°-100°	103.0	1.1
100°-110°	655.0	7.2
110°-120°	884.3	9.8
120°-130°	718.8	7.9
130°-140°	576.4	6.4
140°-150°	454.2	5.0
150°-160°	332.1	3.7
160°-170°	206.3	2.3
170°-180°	70.3	0.8
0°-30°	1542.1	17.0
0°-40°	2449.7	27.1
0°-60°	4089.9	45.2
0°-90°	5046.5	55.8
90°-120°	1642.4	18.2
90°-150°	3391.8	37.5
90°-180°	4001.0	44.2
0°-180°	9047.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2048	2078	2062	2059	2076	194
15°	1943	1968	1943	1940	1954	548
25°	1751	1767	1736	1706	1714	805
35°	1488	1493	1451	1417	1417	929
45°	1194	1188	1148	1108	1092	918
55°	891	888	846	806	795	795
65°	594	588	552	517	509	590
75°	322	311	286	274	272	342
85°	93	82	82	79	76	100
90°	11	19	26	28	28	13
95°	60	81	46	50	57	59
105°	158	230	848	1079	712	168
115°	264	316	729	1509	1764	264
125°	373	423	687	1196	1415	331
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2060.6	2087.1	2071.9	2072.1	2080.9
5°	2047.6	2078.0	2061.7	2059.3	2075.9
7.5°	2026.1	2055.9	2036.8	2033.9	2055.5
10°	2008.0	2035.6	2016.5	2011.2	2030.6
12.5°	1983.1	2010.7	1991.6	1984.1	2003.5
15°	1942.9	1967.8	1942.9	1940.4	1954.2
17.5°	1897.7	1919.2	1890.3	1881.0	1891.5
20°	1863.7	1883.1	1849.6	1835.6	1843.9
22.5°	1820.8	1840.1	1804.4	1783.7	1794.2
25°	1750.6	1767.2	1736.5	1705.6	1713.9
27.5°	1675.4	1688.1	1657.3	1625.7	1628.4
30°	1623.4	1631.6	1600.7	1566.9	1569.6
32.5°	1569.1	1575.1	1541.9	1505.7	1506.3
35°	1487.6	1493.1	1450.8	1416.9	1416.9
37.5°	1401.1	1404.4	1359.2	1322.3	1318.5
40°	1337.7	1343.2	1298.1	1261.2	1252.9
42.5°	1278.9	1280.0	1239.3	1202.3	1191.8
45°	1193.5	1187.9	1148.2	1108.3	1091.7
47.5°	1101.3	1101.3	1056.0	1016.1	1000.6
50°	1037.9	1037.9	992.7	952.8	941.8
52.5°	979.1	976.9	933.9	893.9	878.4
55°	890.9	888.1	845.6	805.8	794.7
57.5°	797.5	797.5	757.9	715.2	703.1
60°	741.0	741.0	701.4	658.6	642.0
62.5°	679.9	677.7	638.0	599.9	589.9
65°	593.9	588.4	551.5	517.4	509.1
67.5°	511.9	506.4	467.2	439.9	434.4
70°	455.3	449.8	412.9	390.2	384.6
72.5°	401.0	393.3	360.9	342.6	337.1
75°	322.4	311.3	285.6	274.3	271.5
77.5°	247.7	228.9	218.3	210.4	207.6
80°	198.0	181.4	175.3	169.6	166.9
82.5°	155.0	138.4	136.9	133.4	130.7
85°	93.3	82.3	82.0	79.1	76.4
87.5°	40.7	35.6	36.9	37.3	37.3
90°	11.3	18.6	26.3	28.1	28.1
92.5°	31.5	30.0	32.9	40.8	42.2
95°	59.9	80.7	45.7	50.5	56.9
97.5°	85.9	144.0	281.6	85.8	72.6
100°	108.2	177.3	554.8	164.5	109.9
102.5°	128.3	201.0	748.4	429.4	234.2
105°	158.4	230.2	848.0	1078.9	712.1
107.5°	191.4	244.6	809.9	1568.9	1466.9
110°	211.4	263.3	787.5	1648.4	1768.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.8	285.6	765.2	1601.9	1805.8
115°	264.5	316.3	728.9	1509.0	1763.9
117.5°	298.9	349.8	720.5	1411.5	1673.6
120°	325.0	372.2	705.6	1337.3	1610.3
122.5°	341.3	394.5	687.0	1273.5	1524.7
125°	373.3	423.4	687.0	1196.4	1414.8
127.5°	397.5	450.7	687.9	1107.0	1322.7
130°	412.4	467.0	691.6	1047.2	1251.9
132.5°	428.7	483.3	689.4	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0

(END OF REPORT)